APPENDIX

NOTES FOR FOMC MEETING

December 13, 1988

Sam Y. Cross

Negative sentiment towards the dollar was intense during most of the intermeeting period. Last week, however, the dollar recovered partially from its lows of late November and its decline for the period was pared back to about 2 percent. The Desk intervened in substantial amounts during the period, with all operations split equally between the Federal Reserve and the Treasury.

Selling pressures against the dollar broke through around the beginning of November. Although questions about U.S. economic policies existed before that, and there were widespread concerns that the international adjustment process was slowing down, the markets generally believed that the U.S. authorities would defend the dollar through the election so that market pressures would not emerge as an issue in the Presidential campaign. As election day approached, however, the foreign exchange markets began to test the dollar and by the time of your last meeting on November 1, we had already started to intervene to support the dollar. Immediately after the election, dollar selling intensified, much of it apparently speculative. Market participants were questioning whether adjustment was still proceeding, and feared that the new Administration might not be able to deal promptly and effectively with the twin deficit problems, in the environment of a Congress controlled more strongly than before by the opposition party.

From our first operations on October 31 through the first two weeks of November, we intervened on 5 occasions to buy about $1 billion, all against Japanese yen. The market was aware of our operations but not greatly impressed, with many believing them aimed more at smoothing the dollar's decline so as to prevent adverse effects on other financial markets rather than reflecting a determination to halt the dollar's fall. Despite official statements to the contrary, market participants thought that there may have been a shift in the U.S. view towards the exchange rate. For several months, some market observers had suspected that any incoming Administration might tolerate or even welcome a lower dollar, and took every opportunity to interpret any actions or comments -- such as Martin Feldstein's statement -- in that light.

The dollar continued to come under selling pressure during much of the rest of November. On November 17 and 18, there was concerted intervention in both marks and yen that did seem to give the market the impression, at least for a while, that the Group of Seven (G-7) remained firmly committed to maintaining stability in the exchange markets. Selling pressures against the dollar abated briefly after these coordinated operations. But when pressures reemerged, and we attempted to counter them through intervention not coordinated with European central banks, traders again began to express the belief that the U.S. authorities might tolerate a gradual decline in the dollar. On November 25, the dollar hit its lows of the intermeeting period of Y 120.65 against the yen and DM 1.7085 against the mark.

For the next ten days, in late November and early December, market sentiment toward the dollar ebbed and flowed, depending on evidence either that economic growth was moderating and the Fed might not be ready to change its policy stance (a conclusion drawn from the Beige Book) or that the economy was really stronger than generally appreciated (a conclusion drawn from employment data). Also the cumulative effect of all the dollar intervention support during the month was beginning to leave a more favorable impression. The sense of central bank support was strengthened when, after the market saw the strong labor market statistics and noted that they were not followed by an immediate discount rate increase, the desk came into the market visibly and aggressively to resist a renewed drop in the exchange rate by buying dollars against both marks and yen. In addition, the efforts of President-elect Bush to put together a team of pragmatic advisors, to reconcile differences with members of Congress, and to attach priority to dealing with the deficit problem gave some of the more pessimistic market observers reason to pause. In these circumstances, the dollar traded tentatively, though above its lows of the period.

But confidence in the dollar remained uncertain, and the market was still quite short of dollars when Gorbachev's speech at the UN briefly tantalized market participants with dreams of an early and significant cut in U.S. military expenditures. What was important about this latest episode was not that, in the euphoria of the moment, the dollar briefly rallied to DM 1.7730 or Y 124.25. It was, rather, that the market was reminded that speculators shorting the dollar could get hurt. Therefore, the period ended with the dollar still shaky but on a somewhat better footing, bolstered by expectations of higher interest rates, and with some renewed sense of two-way risk in the market, a sense which we hope the major central banks can preserve despite some differences in opinion about near-term strategies for exchange rates and interest rates.

For the period as a whole, we sold far more yen -- $1.77 billion equivalent -- than marks -- $630 million equivalent. Yet mark operations seem to have relatively greater market impact. The difference may reflect, partly, that the mark, more than the yen, tends to be the speculative vehicle of choice for foreign exchange market speculators worldwide. In addition, the market appears to hold different attitudes about the fundamental strengths and prospects of the two currencies.

As for the yen, market participants have long been impressed by the agility with which Japan has responded to its currency's appreciation. Recent economic reports from Japan support the picture of strong domestic demand and continued export growth, with market projections showing increases in both Japan's trade and current account surpluses through 1990. This strong performance has continued without a pick-up in inflation, suggesting to many that the yen should move even higher. Also, with so much of the global imbalance reflected directly in the bilateral trade between the U.S. and Japan, there is a widespread view that a large share of the total exchange rate adjustment must come in the dollar/yen relationship. Thus, the market still sees a considerable upside potential for the yen over time.

For the mark, the picture was seen differently. Although the market view of German economic performance has improved recently, prospects for investment in Germany were less than encouraging for much of the year, and both long-term and short-term capital flowed out of mark assets on a large scale. The Bundesbank is concerned that the mark appears relatively weak at a time when Germany has a strong and growing current account surplus and may feel the need to demonstrate its commitment to sound economic management when setting its monetary targets for 1989 next Thursday.

Mr. Chairman, I would like to recommend that the Committee approve the Federal Reserve's share of the Desk's dollar purchases during the period. In other operations during the period the Desk purchased a total of $25.2 million equivalent of Japanese yen on behalf of the U.S. Treasury to augment balances. The Central Bank of the Argentine Republic, on November 22, drew $79.5 million on a previously existing U.S. Treasury short-term financing facility and subsequently repaid $31.8 million on November 23. The U.S. Treasury's short-term financing facilities for Brazil and Yugoslavia matured on November 30. The Central Bank of Brazil had repaid their $232.5 million drawing on a $250.0 million facility on August 26. The remaining $17.5 million was not drawn. The National Bank of

Yugoslavia had repaid the outstanding balance on its $50.0 million swap facility on September 30.

NOTES FOR FOMC MEETING

DECEMBER 13 - 14, 1988

PETER D. STERNLIGHT

Domestic open market operations since the last Committee meeting have been complicated by an uncertain and elusive relationship between discount window borrowings and money market rates, and by several wire system mishaps that led to spikes in borrowing unrelated to general market pressures. In hindsight, the relationship of borrowing and funds rates was already coming unglued in October or even earlier, but it seemed plausible as the new period began to expect things to "return to normal." They didn't. Thus after starting the period with a planned borrowing gap of $600 million, we found ourselves continually battling to keep funds from rising appreciably above the anticipated 8 to 8-1/4 percent range even while borrowing ran noticeably below its planned level. In effect, to avoid having funds persistently trade well above the range envisioned by the Committee, we provided some additional nonborrowed reserves.

This situation was drawn to the Committee's attention in a conference call on November 22, and following that call we used a $400 million path level of borrowing, anticipating--though still with considerable uncertainty--that funds might range around 8-3/8 percent. Primarily, this recognized an apparent shift in the borrowing-Fed funds relationship, but it was also noted at that call that recent news on the economy had suggested continuing strength, with overtones of potential inflationary pressure. In this context, a funds rate around 8-3/8 percent was considered acceptable where earlier in the period this level had been resisted. Actual funds rates didn't change all that much--averaging about 8.30 percent in the November 16 maintenance period and 8.38 in the November 30 period, but the more discerning market participants noticed the difference.

Following the strong November employment report released on December 2, market anticipation of System firming tended to pull the funds rate still higher. Without a deliberate Desk change, funds edged up to around 8-1/2 - 8-5/8 percent, with many market participants imminently expecting a discount rate move. Meantime, the Desk sought at least to keep pace with projected reserve needs, especially when funds rates traded significantly above the expected. In this setting, funds have averaged about 8.57 percent so far in the current reserve period through yesterday; today, it's been a shade softer -- 8-7/16.

Several separate incidents involving computers and funds transmission systems played hob with actual borrowing levels during the period. In the November 16 period, a problem at a large midwest bank caused that institution to pile up massive excess reserves, which it couldn't work off over the rest of the period, while some other banks that had expected to receive funds had to use the discount window. In response, we allowed for higher excess reserves while borrowing averaged higher than it would otherwise -- though still not above the path level then in use. In the November 30 period, a large New York bank had technical problems that caused it to borrow in size on a Friday, leading the Desk to make some allowance for special situation borrowing rather than over-provide reserves. And finally, early in the current reserve period, a problem at a Reserve Bank produced a massive one-day reserve deficiency that forced several money center banks to borrow even though there were later "as-of" reserve adjustments. Once again it was deemed appropriate to treat the special borrowing as more akin to nonborrowed reserves.

On days free of these special problems, adjustment and seasonal borrowing during the intermeeting period averaged about $315 million, while inclusion of the problem days would produce an average of about $535 million.

Money growth behaved reasonably well in the recent period. M2 increased at just under 4 percent in the 2 months ended in November, somewhat ahead of the slow 2-1/2 percent September-December pace contemplated at the last meeting, leaving November M2 modestly below the mid-point of its annual growth cone. M3 growth of 5-1/2 percent for the 2 months ended November tracked close to the indicated 6 percent September-December path, leaving M3 somewhat over its annual cone mid-point. M1 barely grew over the most recent two months--edging up at just over a

1 percent rate, which placed November at a modest 4 percent growth rate since the fourth quarter last year.

To meet seasonal reserve needs over the intermeeting period, the Desk bought over $7-1/2 billion of Treasury issues, making use of the temporarily enlarged leeway. Market purchases included $3 billion of bills at the start of the period and $3.5 billion of Treasury coupon issues in late November, while about $1.2 billion of bills and notes were purchased from foreign accounts over the course of the interval. On most days the Desk arranged either System or customer repurchase agreements.

Incidentally, so far in 1988, with just a few weeks remaining, our net outright purchases of Treasury issues come to a little over $14 billion, including $5 billion in bills and somewhat over $9 billion in coupon issues. This year's rise, to date, is well short of last year's $21 billion portfolio increase. Part of the reason for a lesser rise this year can be traced to changes in foreign currency holdings this year and last, and the meeting of some reserve needs this year through extended credit borrowing.

Yields on Treasury issues generally rose during the intermeeting period, but by widely varying amounts in a range of about 25 to 95 basis points. The smaller increases were posted for longer maturities so that the yield curve flattened and even inverted slightly. The major force pushing yields higher was the market's perception that the economy remains strong, or perhaps has regained some strength after a summer lull. Major price moves came in the wake of the unexpectedly strong employment reports for October and November. A softening dollar and rising oil prices also encouraged higher yields, though these factors were erratic over the period.

Many market participants assumed that monetary policy was already beginning to firm up a bit further after holding steady in September and October, or soon would do so in response to the inflationary potential implied by the economy's continuing strength and absorption of available resources. As the period began, market observers seemed to expect that funds rates would soon return to the 8-1/4 percent area prevalent earlier in the fall. By late November, most participants were reconciled to a funds range around 8-3/8 percent, and this gave way in early December, after another strong employment report, to anticipation of 8-1/2 or 8-5/8 percent, quite likely to be followed by a discount rate rise.

The largest rate increases in the Treasury list were in the 1 to 2-year maturity range, sending 2-year yields somewhat above the 30-year yield. The peak in Treasury yields--if one can so dignify the modest differentials in an essentially flat curve--now seems to be in the 2 to 10-year range. It may be reading too much into the recent rate trends, but one view is that the modest size of increases at the long end has reflected market confidence that, while the economy is strong and inflation a threat, the central bank will take appropriate action to keep the situation in hand. There could also be technical factors at work, such as investor switching from corporate to Treasury bonds and active stripping of long Treasury issues which reduces available supplies.

The Treasury raised roughly $37 billion, net, over the period, divided about evenly between bills and coupon issues. Coupon issues included $9 billion of new 30-year bonds, the first in 6 months, offered after the President signed legislation removing the 4-1/4 percent ceiling on bonds that has long been a thorn in the side of Treasury debt managers. The new bonds were auctioned at 9.10 percent on November 17 and with some net price gains in the longer end over the latter part of the interval, they closed to yield a little under 9 percent. As the period began the active long bond yielded about 8.72 percent.

Key bill rates rose about 75-90 basis points over the interval, propelled by anticipations of policy firming, supply increases, and some actual rise in funds and financing costs. The latest 3- and 6-month issues were auctioned yesterday at 7.98 and 8.21 percent, respectively, up from 7.37 and 7.48 percent at the end of October.

Private short-term rates also rose substantially over the period--by 80-90 basis points or so in the 3-month area and even more for shorter maturities. In addition to policy firming concerns, year-end factors and possibly preparations to fund upcoming corporate buy-outs may have played a role in the rate rise. Banks raised their prime rates 1/2 percentage point to 10-1/2 percent in a widely anticipated move.

In the Federal agency market, FICO sold two issues, each for $700 million, through competitive syndicate bidding for the first time. The yield spreads against Treasury bonds narrowed despite the gloomy thrift industry outlook as it is widely assumed that massive Federal help will be forthcoming for this industry.

The corporate market, especially industrial issues, remained under somewhat of a cloud in the wake of the RJR-Nabisco buy-out plans, but light issuance actually permitted some measures of yield spreads over Treasuries to narrow a bit. A few corporate issues have come to market with special features to protect against downgradings in the event of take-overs. High-yield bonds fared relatively well vis-a-vis Treasury issues despite prospective substantial enlargements to supply.

Meantime, a threat continues to hang over the Drexel Burnham firm--a major financial market participant. There should be news quite soon either of a settlement with the Justice Department, with admission to some serious charges, or of a criminal indictment of the firm. In either case the firm could face rough going.

Finally, on a housekeeping note, the Desk has begun a trading relationship with two additional firms in recent days--S.G. Warburg and Wertheim Schroeder. Both firms had been primary dealers since last June. We now trade with all but 5 of the 46 primary dealers.

December 13, 1988

BORROWING BRIEFING
Donald L. Kohn

I have only a little to add to the memos the FOMC has received on this subject. In summary, a substantial decrease in borrowing at the discount window at given spreads of the funds rate over the discount rate developed this fall. It was widespread by size of institution, with a considerable amount accounted for by smaller institutions. We have not identified any convincing rationale for the shift. It does not seem to involve a change in the way the window is administered. As for the behavior of borrowing institutions, we have a number of hypotheses, but have not been able to confirm empirically any reasons for depository institutions to draw back from the use of discount window credit when they did. The ongoing dimensions of the shift also are not clear; to date, there have been few signs of reversal. In the bluebook, we posit some increase in the willingness of large banks to come to the window early next year. These institutions may be trying to reduce discount window usage at this time in anticipation of more profitable opportunities later owing to rising money market pressures associated with year-end, financing of large corporate restructurings, or tighter monetary policy. In this respect, similar behavior was evident right before year-end last year, and was partly reversed in January, though some permanent shift still remained as an aftermath of the financial turmoil of the stock market collapse.

Given the emerging size of the disturbance to the borrowing relation, open market operations were carried out with some extra flexibility over the intermeeting period, as Mr. Sternlight has already commented. Initially, the Desk tolerated both some upward pressure on funds relative to the Committee's expectations, and a shortfall in borrowing relative to path. Even after the formal adjustment to path, while reserve provision has been fully consistent with making the borrowing objective a bit more attention than previously has been paid to the federal funds rate. This shift in emphasis has reflected both lingering uncertainties about the new borrowing relation, and concerns about misleading market participants in a period of greater-than-usual speculation about possible shifts in monetary policy.

The Committee has gone over the arguments for and against using borrowing as an operating objective on several occasions. The principal arguments in favor involve the flexibility in the federal funds rate that comes from avoiding a narrow focus on this rate in policy implementation. A borrowing objective allows some limited scope for market forces, including expectations, to show through, and in the process, may facilitate needed policy adjustments. The argument against is that the overnight rate is the proximate variable through which policy actions affect the economy, and adhering to a borrowing target can allow that rate to deviate for a time from the level consistent with the Committee's desired policy. Such deviations are all the more likely when the borrowing function shifts permanently, given that it may take some time to recognize and compensate for such shifts.

In that regard, the recent experience certainly does not strengthen the case for a borrowing objective. Even so, despite the massive size of the current disturbance to the function, the outcome in money markets probably did not differ very substantially or for very long from interest rate levels consistent with the Committee's discussion and understanding, given the slight firming deliberately sought on the basis of incoming data. This result was largely a consequence of the flexibility exercised by the Desk, in consultation with the Chairman, the Reserve Bank President on the call, and the Committee.

Michael J. Prell
December 13, 1988

FOMC BRIEFING--ECONOMIC OUTLOOK

As you know, with the current Greenbook the staff has taken its first stab at portraying how 1990 might look. The picture we've presented isn't very pretty. We have suggested that, if it is the aim of the Committee not merely to hold the line on inflation but, rather, to restore a downward trend by 1990, then it may be necessary to run the risk of some financial stress and economic weakness.

There are three key premises behind this conclusion: First, that oil and food supply conditions will provide only a little help in damping overall inflation in the next couple of years; second, that current levels of resource utilization are not compatible with slowing wage and price inflation; and third, that additional macropolicy restraint will be needed to slow economic growth enough to reduce utilization rates to disinflationary levels.

As we see it, the incoming information since the November meeting is on balance supportive of these assertions.

Starting with the oil market, we believe that OPEC showed a bit more resolution than might have been expected in reaching its accord on production limits. The adroit handling of the Iraq-Iran quota dispute and the seeming intensification of pressures on the Arab Emirates to stop their egregious violations lead us to think that OPEC output is likely to be lower than we had assumed previously. Consequently, we've assumed a $2-1/2 per barrel increase in oil import prices over the next year, from a low $12.50 in the current quarter. Translating this into consumer energy prices, we are looking for a 2 percent increase next year, rather than the 1 percent decline in our last forecast.

On the food price front, we've seen a fairly rapid reversal of the earlier run-up in fruit and vegetable prices, and meat supplies have been ample of late. Over the next year, we're likely to see some softening of grain and oilseed prices if harvests are normal, but with beef supplies falling and labor costs rising, we are projecting consumer food price inflation of about 3-1/2 percent.

In our projection, these comparatively moderate increases in food and energy prices prevent a discernible deterioration in overall price inflation next year. But the underlying tendency is still there, perhaps most notably in compensation. This brings me to the second assertion I mentioned earlier--namely, that the pressures on resources are excessive. While the recent evidence on this point is not absolutely clearcut, we think it suggests that the risks are skewed rather markedly in one direction. Apart from signs of softening in a few materials markets, the picture--anecdotally and statistically--is one of stable or rising wage- and price-inflation trends.

On the statistical side, the readings on wages have been sparse. The hourly earnings index for production and non-supervisory workers jumped 0.7 percent in October and then was unchanged in November; these movements, on net, left intact the general uptrend in the year-on-year increases that began in the middle of 1987. Meanwhile, recent monthly changes in the consumer and producer price indexes have not indicated a clear ongoing acceleration or deceleration.

Given that there was no sign of a diminution in pressures prior to the recent drop in the dollar and further increase in resource utilization, we see no reason to expect that the underlying trend of inflation will improve in the near term. Indeed, in putting together our forecast of wages and prices, we have continued to discount the predictions of a variety of econometric models, which point to a substantial acceleration. Perhaps I should say a variety of non-monetarist models. A monetarist formulation would suggest that inflation should moderate before long, in light of the slower money expansion path we've been on; but, in most cases, the models also would look for a weakening in real activity.

This brings me to the third and final premise of the projection--namely, that, in the absence of additional policy restraint, economic activity will be too strong to restore a downtrend in wage and price increases within the next two years. Under the assumptions we've made about legislative action on the 1990 federal budget, fiscal policy probably will be supplying some of this restraint. But we still believe an appreciable burden will fall on the Fed, and we've built into our forecast a rise in short-term interest rates of about 2 percentage points over the next year to 18 months. There is no question that this is considerably more than the markets are anticipating, and we would expect that it would put a noticeable dent in stock and bond prices. Perhaps, though, the policy issue today is not so much how great a tightening of money market conditions may ultimately be needed but simply whether any appreciable further rise in rates is required, given the increase that has already occurred.

Obviously, the staff's answer to that question is yes, and we perceive support for that proposition in the recent economic data. The most noteworthy news was contained in the employment reports for October and November. The payroll gain of 700,000 and the lower jobless rate argue for expecting that real GNP growth in the current quarter will roughly match the 3-1/2 percent drought-adjusted pace of the first nine months of this year. With factory jobs increasing another 70,000 last month, we'll be publishing tomorrow morning a one-half percent increase in November industrial production; the quarterly-average rise appears likely to exceed 4 percent. In manufacturing, the quarterly gain probably will be around 5-1/2 percent.

At the time the Greenbook was completed, indicators on the spending side of the ledger were quite skimpy. We noted that, to that point, they seemed a bit softer than the production side. Implicitly, we were looking for some stronger expenditure data in subsequent releases. This morning we received the advance reading on November retail sales. Total sales are estimated to have risen 1.1 percent last month, and the increase for October was revised upward, from 0.9 percent to 1.6 percent. These are big numbers, but because we were anticipating strength, they would cause us to raise the projection of real consumer spending growth in the fourth quarter only marginally from the 2-1/2 percent rate in the Greenbook.

Indicators of other sectors of demand present a mixed picture. The housing market has, if anything, been firmer than we expected in our previous forecast. Starts surged in November to a 1.55 million unit annual rate--the highest since the spring--and sales of new homes have remained strong. With mortgage rates having turned up in the past month, we're not projecting that the recent strength in demand will be sustained; however, we have raised the near-term forecast of residential investment somewhat.

In contrast, nonresidential fixed investment has appeared surprisingly weak of late. Again, I must emphasize that we are working here only with October data--and they are extremely volatile ones at that. Both shipments of nondefense capital goods and construction put-in-place were sluggish in October, and weak car sales indicate softness in that category of business spending, too. As a result, we've projected essentially no change in real business fixed investment for the quarter as a whole.

Clearly, one of the key factors in our assessment that a further rise in interest rates is needed is the judgment that the underlying tendencies in capital spending are stronger than the recent spending data suggest. To be sure, orders at domestic equipment manufacturers were weak in the early fall, and construction contracts are unimpressive. On the other hand, though, we've seen continued growth in backlogs, as well as rising employment in the machinery industries. There are still many anecdotal reports of increasing capital outlays, and two private surveys of 1989 plans for plant and equipment spending indicate nominal increases of between 5 and 6 percent. We therefore expect that equipment outlays will revive in the next few months, more than offsetting what we anticipate will be a downward drift in commercial construction.

The other component of business spending, inventories, provides no hint of an emerging overhang that would be a major drag on output growth. Apart from auto dealers, firms mostly report comfortable stocks, and as with fixed investment, the chances of a recessionary miscalculation seem to be minimized by the lack of ebullience in business expectations. In the auto sector, there has been some buildup of stocks in the past couple of months, but a combination of enhanced incentives and some trimming of assembly schedules should be able to deal with that fairly quickly. The slowing in nonfarm output growth we've projected for the first quarter can be attributed arithmetically to the anticipated decline in auto production.

In sum, as we see the situation, the rise in interest rates this year has not been enough to severely depress domestic final demand. At the same time, we believe that the tradable goods sector is still benefiting from rising export demand. The underlying improvement in real net exports may be obscured in the current quarter by an influx of cheap imported oil. However, the trend should reemerge next year, accentuated initially by a drop-back in the oil flow. The recent depreciation of the dollar should help sustain the gains in trade, and we've assumed a further moderate nominal depreciation as well--running about 6 percent per annum. In fact, it seems to us likely that, if the trade adjustment is perceived to lag, the downward pressures on the dollar will intensify--albeit with potentially discomforting implications for domestic interest rates and inflation.

I have focused my remarks on the near-term outlook. We did attempt to lay out the fundamental logic of the projection through 1990 in the Greenbook, however, and we shall be discussing that forecast and the implications of alternative monetary and fiscal policies in the February chart show. Given what we've reported previously, I suppose that you can already predict the broad outlines of those implications: in short, all other things equal, a lesser degree of monetary restraint would produce greater inflation in 1990, while a more forceful effort to reduce the federal budget deficit could substantially ease the domestic financial pressures foreseen in the present projection. But we shall attempt to refine and quantify this at the next meeting.

E.M. Truman
December 14, 1988

Report on October Trade Data

This morning the Commerce Department issued its latest release on U.S. trade data. For October, on a seasonally adjusted customs valuation basis -- that is, excluding the cost of insurance and freight-- the trade deficit narrowed slightly to a preliminary level of $8.9 billion, from a upward revised level of $9.2 billion in September; before revision, the September deficit had been reported as $9.0 billion. On a cif basis, the deficit in October was $10.35 billion. As was indicated at the meeting yesterday afternoon, exchange market participants reportedly expected a deficit of about $10 billion on a cif basis. In exchange markets this morning, the dollar edged off against major currencies following the release of the trade data.

The value of total imports, fell 1.7 percent in October. Imports of oil fell slightly in value terms, as an unchanged volume was offset by a decline in price. Non-oil imports fell 1-1/2 percent with declines recorded in imports of capital goods and consumer goods.

The value of non-oil imports was up only slightly from the average monthly level in the third quarter. We expect the value of non-oil imports to rise moderately over the forecast period, although the quantity of imports, other than computers, should be pretty flat.

Exports declined 1.1 percent in October. Agricultural exports were somewhat lower. Boosted by higher aircraft shipments, non-agricultural exports apparently were unchanged from their September level; they were up slightly (about 1-1/2 percent) from the average for the third quarter and were about 23 percent above their level in October of 1987. The decline in nonagricultural exports was principally in industrial supplies and materials; exports of capital goods were essentially unchanged from the September level. The staff expects a somewhat slower rate of increase of nonagricultural exports over the forecast horizon--about 13 percent in value terms--reflecting for awhile the continuing effects of the strength of the dollar through much of 1988 and the slowing of foreign growth from the rapid rates seen this year.

The data released this morning were marginally worse than the staff's expectations. However, given the volatility of these data, we would not be inclined to alter our basic view of the outlook, described in the current Greenbook, either for the current quarter or for the next two years. However, today's data are likely to provide some support for the view that the expansion of U.S. exports has stalled.

December 14, 1988

POLICY BRIEFING
Donald L. Kohn

As a number of people have already remarked, the period since the last FOMC meeting has seen a further flattening of the yield curve. As can be seen in chart 1, this occurred with short-term rates rising substantially, while long-term rates increased by considerably less--a fairly typical pattern for 1988. Long-term rates have risen by less than half a percentage point since last winter, while short-term rates have gone up about two percentage points. Moreover, viewed in a slightly longer context, Treasury bond rates have fluctuated mostly around 9 percent for more than a year and a half.

This behavior of long-term rates raises a question about the degree to which monetary policy has applied effective restraint on the economy this year. A focus on long-term rates remains appropriate, even with the spread of variable-rate financing in the 1980's. Long-term rates still directly affect a substantial volume of funding and spending decisions. In any case, these rates embody a set of expectations about the path of future short-term rates that anyone contemplating a long-term resource commitment would have to take into account.

The most obvious interpretation of the changes in the yield curve and the lack of trend in long-term rates is that savers and spenders do believe that the Federal Reserve has applied--or will soon apply--sufficient restraint to forestall a major, sustained increase in inflation rates. The current configuration of rates suggests expectations of some additional firming of policy in the near term, but very little subsequent increase in rates. By contrast, as Mike has noted, the greenbook forecast embodies a quite different outlook for rates. A portion of the difference lies in the staff's assumption of a policy that will foster a reduction of inflation--an outcome the market does not seem to be anticipating. But the more important factor is the notion in the staff forecast that rates have not yet increased to levels that will forestall additional pressures on resources and higher inflation.

The differences between the market and staff outlooks involve, at least implicitly, some judgment about two, unfortunately, partly unobservable variables--the actual level of real interest rates and an equilibrium level consistent with the economy growing along a path that will not cause inflation to increase or decrease. The actual level requires a measure of inflation expectations; the equilibrium level, some notion of the factors impinging on spending and saving decisions relative to the economy's potential, taking into account developments abroad as well as domestically.

One reading on long-term inflation expectations and of actual long-term real rates is from the Hoey survey of 10 year inflation expectations, shown in chart 2. The last column of this chart shows a drop in inflation expectations from spring of 1987 when the Federal Reserve began to tighten. However, the survey does tend to confirm the evidence of the yield curve that inflation is expected to remain near or a little above the rates generally prevailing in recent years. The decrease in inflation expectations implies an upward tilt to real long-term rates, shown in the lower panel, since the spring of 1987, following the substantial increase in this measure that occurred with the initial upward movement in nominal rates in early 1987.

One year ahead inflation expectations, shown in the first column, have risen on balance since early 1987 or 1988. These expectations are likely to be more confidently held than those looking ahead 10 years, and real rates derived from them, though not as relevant in theory, may better indicate immediate influences on spending decisions.

The one-year expectations from the Hoey survey have been subtracted from 1-year treasury rates to produce one-year real rates in the top panel of chart 3. The middle panel uses the inflation expectations in the Michigan consumer survey, which have roughly paralleled those in the Hoey survey. The bottom panel uses recent actual inflation rates as a proxy for inflation expectations. In all three measures, the intensification of inflation expectations has damped the increase in real rates associated with the System's firming since March. As a consequence the rise in real rates through most of 1987 and 1988 appears fairly moderate. The most recent plot on the charts, connoted with a star, was constructed using yesterday's nominal interest rate together with the last available inflation expectations. The apparent jump in real rates shown by the star must be interpreted cautiously, since the measures of inflation expectations have not had a chance to react to the recent strength in the economic data, but nominal rates have; one-year rates rose another 10 basis points yesterday following release of the retail sales data. Judging whether, taking account of these factors, real rates have risen sufficiently to restrain growth to a more sustainable pace over the next year or so and to avoid additional inflation requires as well that they be compared to an equilibrium real rate level.

This equilibrium level has even less foundation in directly observable market quotes or statistical measures. To a considerable extent it must be inferred from past observations of real rates and their effect on the economy, together with an analysis of factors that might have affected this relationship. Real rates now are well above the late 1970s, when they were associated with excessive demands and accelerating inflation. But they are under levels earlier in the current expansion, when the economy was growing rapidly, and in particular below the rate needed to slow expansion in 1984. Demand in that period, however, was boosted by substantial fiscal stimulus and catchup spending following the recession, with some offset from expanding imports.

Real rates also are higher than they seem to have been in the early 1960's, a period of sustained noninflationary growth. Two factors make it likely that the equilibrium level of real rates has risen substantially from that earlier period. First, deregulation of the financial system and innovations in financial instruments have reduced liquidity and credit availability constraints on borrowers. In the absence of roadblocks to spending associated with difficulties in obtaining credit as a result, for example, of disintermediation and usury ceilings, real rates must now rise higher to exert the same restraint on spending. Second, partly as a consequence of the fiscal deficit, we are a high consumption-low national saving economy. The consequence of this for interest rates was damped for a time by the flow of saving from abroad. But, the rapid improvement in our external balance in real terms in 1988 in response to the earlier decline in the dollar, together with the small size of the shift toward less fiscal stimulus probably has worked to raise the appropriate level of real rates this year. These effects may have been offset to an extent by the effects of the decline in the stock market in late 1987, which boosted saving to a degree.

On balance it would seem that relatively high real rates by historical standards probably are needed now to keep spending in line with the economy's potential. These equilibrium real rates likely have not changed very much this year, but if they changed they probably rose a bit, further limiting the additional monetary restraint implied by the increase in measured real rates. However, the rise in real rates from their trough in 1986 probably has contributed to taking some steam out of the economic expansion in 1988 relative to 1987. And the lagged effects of further increases this fall should lead to additional slowing in the nonfarm economy next year. If the slowing already in train were thought to lead to a pace of expansion and level of demand no greater than the economy's potential, then alternative B might be considered appropriate. After year-end, short-term interest rates might edge down a little under this alternative, given that federal funds eventually might center a bit below recent levels, and that the firming expected by the market would not materialize. The implications for long-term rates are more difficult to discuss. The interest rates of this alternative would be likely to keep M2 growth above the bottom of its tentative 1989 range over the first quarter, with growth of about 4 percent expected.

On the other hand, if, in light of the continued expansion of the economy at rates above potential and the moderate rise in real rates so far together with the current relatively high level of resource utilization, the risks were still seen to be asymmetrically on the side of higher inflation, an additional tightening of policy, such as incorporated in alternative C, might be considered. Although some firming is built into the existing structure of short-term rates, the size and immediacy of the alternative C action would raise short-term rates, though by less than the size of the increase in the federal funds rate. This increase would be echoed in real as well as nominal rates, unless new information caused an upward revision in inflation expectations. With interest rates and opportunity costs rising under this alternative, demand for money would be restrained, and through March M2 might grow around the lower end of its 3 to 7 percent tentative range.